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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,652	07/17/2002	Patrick Sangouard	NITROS P 158US	3096

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EXAMINER

ROY, BAISAKHI

ART UNIT	PAPER NUMBER
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3737

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,652

Applicant(s)

SANGOUARD, PATRICK

Examiner

Baisakhi Roy

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/24/02, 7/17/02</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Sp cification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it exceeds 150 words and it begins with the phrase, "The invention concerns". Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Puppo (5230329) in view of Müller et al. (4608983).

Regarding claim 9, Puppo discloses a lithotripter apparatus with a mount component, a treatment table, a device for generating and focusing shock waves on a lithiasis with a semi-ellipsoidal reflector, and a device for live viewing of the treatment zone (abstract, col. 1 lines 34-39 lines 64-68, col. 2 lines 1-29, and claim 1). Puppo does not explicitly disclose said shock generating device to include two electrodes spaced apart from each other and connected to a high voltage energy generating circuit, the first and second focal points, and the wear compensation means on the electrodes. Müller et al. discloses an apparatus for the elimination of concretions situated inside a patient's body with said apparatus comprising of means for generating and focusing shock waves on a lithiasis with a semi-ellipsoidal reflector and two electrodes separated from each other and connected to a high voltage energy generating circuit with the electrode ends situated at one of the focal points and the other focal point being located on the lithiasis, and a compensation mechanism which axially displaces the electrodes along the axis of symmetry of the reflector and turns one of the electrodes on its longitudinal axis (abstract, col. 2 lines 8-44 lines 56-68, col. 3 lines 2-6 lines 45-68, col. 4 lines 1-37, col. 5 lines 40-49, col. 6 lines 15-22, col. 7 lines 49-61, and claims 1, 6, 7). It would have therefore been obvious to one of ordinary skill in the art to use the teaching by Müller et al. in the teaching by Puppo for the purpose of eliminating lithiasis by applying shock waves that are precisely aimed which eliminates the possibility of causing lesions in surrounding tissue and reducing wear of the electrodes.

Regarding claims 10 and 11, Puppo does not explicitly teach said apparatus to include the two electrodes as previously mentioned. Müller et al. further teaches said electrodes to be located along the axis of the reflector and housed inside a component which is joined to a mechanism to axially displace said component along with the electrodes and cause each component to rotate along its longitudinal axis (abstract, col. 2 lines 23-44 lines 56-64, col. 3 lines 7-23, col. 4 lines 24-37, col. 6 lines 15-22 lines 42-54, col. 7 lines 1-40, and claims 1-7). It would have therefore been obvious to one of ordinary skill in the art to use the electrode arrangement teaching by Müller et al. in the teaching by Puppo for the purpose of enabling more precisely aimed shock waves.

Regarding claim 12, Puppo further teaches said apparatus to include a computer to determine the spatial coordinates of the lithiasis to be treated and of the reflector and a means for enabling the focal point to be positioned on the lithiasis (col. 1 lines 40-57, col. 2 lines 50-68, col. 3 lines 1-25).

Regarding claim 13, Puppo teaches said apparatus to include means for the displacement of the reflector without the need to move the patient with a component such as a housing that comprises of the reflector and a second component such as a chariot to which the first component is attached, and slides that allow the second component or the chariot to be displaced in different directions (col. 1 lines 7-12 lines 34-39 lines 45-55, col. 2 lines 15-29, col. 3 lines 26-53).

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Puppo in view of Müller and further in view of Reitter et al (5583901). Puppo

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teaches said viewing device to be a radioscopic apparatus pivoting in its plane about its center, with a screen for displaying the radioscopic images, and means for communicating the visual data to a computer (col. 3 lines 6-25) as described above, but does not explicitly teach said radioscopic device to include an x-ray generator and receptor. Reitter et al. discloses a lithotripter apparatus with a device for generating and focusing the shock waves on a lithiasis with live viewing mechanism to include a radioscopic apparatus comprising an x-ray generator and receiver attached to a first and second extremity to an arc-shaped arm and pivoting in its plane about its center (abstract, col. 5 lines 35-48). It would have therefore been obvious to one of ordinary skill in the art to use the x-ray generator/receiver teaching by Reitter et al. in the teaching by Puppo and Müller et al. for the purpose of applying such a radioscopic device for the live viewing of the treatment zone.

6. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Puppo in view of Müller et al. in view of Pell (5065761), and further in view of Breidenthal et al. (4608979). Puppo teaches said apparatus to include an echograph device, a screen for displaying the echograph images, a plurality of image generating systems located at various locations relative to the treatment zone, a mechanism for the communication of the visual data to said computer (col. 1 lines 20-29 lines 45-57, and col. 3 lines 6-25). Puppo however does not explicitly teach said apparatus to include a plurality of cameras located perpendicular and oblique to a particular zone of interest. Pell teaches said shock wave generating and focusing lithotripter apparatus to include a plurality of

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image x-ray cameras located in such a position to generate an image oblique to the zone of interest (col. 4 lines 45-56, col. 8 lines 32-41). It would have therefore been obvious to one of ordinary skill in the art to use this particular camera arrangement teaching by Pell in the teaching by Puppo, and Müller et al. for the purpose of generating images oblique to the zone of interest. Puppo, Müller et al., and Pell however do not teach placing the cameras perpendicular to the zone of interest. In the same field of endeavor, Breidenthal et al. discloses a lithotripter apparatus with a plurality of image generating x-ray cameras located in such a position to generate an image perpendicular to the zone of interest (col. 4 lines 1-39). It would have therefore been obvious to one of ordinary skill in the art to use this particular camera arrangement teaching by Breidenthal et al. in the teaching by Puppo, Müller et al., and Pell for the purpose of generating images perpendicularly to the zone of interest.

7. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Puppo in view of Duinker et al. (4630607).

Regarding claim 9, Puppo discloses a lithotripter apparatus with a mount frame, a treatment table, a device for generating and focusing shock waves on a lithiasis with a semi-ellipsoidal reflector, and a device for live viewing of the treatment zone (abstract, col. 1 lines 34-39 lines 64-68, col. 2 lines 1-29, and claim 1). Puppo does not explicitly disclose said shock generating device to include two electrodes spaced apart from each other and connected to a high voltage energy generating circuit, the two focal points, and the wear composition means on the electrodes. Duinker et al. discloses a lithotripter apparatus with a

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device for generating and focusing the shock waves on a lithiasis with a semi-ellipsoidal reflector, two electrodes separated from each other and connected to a high voltage energy generating circuit with the electrode ends situated at one of the focal points and the other focal point being located on the lithiasis, and a compensation mechanism which axially displaces the electrodes along the axis of symmetry of the reflector and turns one of the electrodes on its longitudinal axis (abstract, col. 2 lines 25-38 lines 43-46, col. 3 lines 45-49, lines 61-65, col. 5 lines 9-18, and claims 1, 7). It would have therefore been obvious to one of ordinary skill in the art to use the teaching by Duinker et al. in the teaching by Puppo for the purpose of eliminating lithiasis by applying shock waves that are precisely aimed which eliminates the possibility of causing lesions in surrounding tissue and reducing wear of the electrodes.

Regarding claims 10 and 11, Puppo does not teach said apparatus to include a first and second electrode as described above. Duinker et al. further teaches said electrodes to be located along the axis of the reflector and housed inside a block or tube which is joined to a mechanism to axially displace said block along with the electrodes to cause each tube to rotate along its longitudinal axis (col. 2 lines 25-54, col. 3 lines 45-49, col. 5 lines 9-19, and claims 1, 7, 9). It would have therefore been obvious to one of ordinary skill in the art to use the electrode arrangement teaching by Duinker et al. in the teaching by Puppo for the purpose of enabling more precisely aimed shock waves.

Regarding claim 12, Puppo further teaches said apparatus to include a computer to determine the spatial coordinates of the lithiasis to be treated and of the reflector and a means for enabling the focal point to be positioned on the lithiasis (col. 1 lines 40-57, col. 2 lines 50-68, col. 3 lines 1-25).

Regarding claim 13, Puppo teaches said apparatus to include means for the displacement of the reflector without the need to move the patient with a component such as a housing that comprises of the reflector and a second component such as a chariot to which the first component is attached, and slides that allow the second component or the chariot to be displaced in different directions (col. 1 lines 7-12 lines 34-39 lines 45-55, col. 2 lines 15-29, col. 3 lines 26-53).

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Puppo in view of Duinker et al. as set forth above, and further in view of Pell. Puppo teaches said viewing device to be a radioscopic apparatus pivoting in its plane about its center, with a screen for displaying the radioscopic images, and means for communicating the visual data to a computer (col. 3 lines 6-25) as described above, but does not explicitly teach said radioscopic device to include an x-ray generator and receptor. Pell discloses a lithotripter apparatus with a device for generating and focusing the shock waves on a lithiasis with live viewing mechanism to include a radioscopic apparatus comprising an x-ray generator and receiver attached to a first and second extremity to an arc-shaped arm (col. 5 lines 64-68, col. 6 lines 1-18, lines 65-68, col. 7 lines 11-68, col. 8 lines 42-51, and claim 1). It would have therefore been obvious to one of

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ordinary skill in the art to use the x-ray generator/receiver teaching by Pell in the teaching by Puppo and Duinker et al. for the purpose of applying such a radiosopic device for the live viewing of the treatment zone.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Puppo in view of Duinker et al., as set forth above, and further in view of Bauer (6221014). Puppo teaches said viewing device to be a radiosopic apparatus pivoting in its plane about its center, with a screen for displaying the radiosopic images, and means for communicating the visual data to a computer (col. 3 lines 6-25) as described above, but does not teach said radiosopic device to include an x-ray generator and receptor. Bauer discloses a lithotripter apparatus with a device for generating and focusing the shock waves on a lithiasis with live viewing mechanism to include a radiosopic apparatus comprising an x-ray generator and receiver (col. 2 lines 53-67, col. 3 lines 1-37, col. 4 lines 4-15, and claim 1). It would have therefore been obvious to one of ordinary skill in the art to use the x-ray generator/receiver teaching by Bauer in the teaching by Puppo and Duinker et al. for the purpose of applying such a radiosopic device for the live viewing of the treatment zone.

10. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Puppo in view of Duinker et al., in view of Pell, as set forth above, and further in view of Breidenthal et al. Puppo teaches said apparatus to include an echograph device, a screen for displaying the echograph images, a plurality of image generating systems located at various locations relative to the

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treatment zone, a mechanism for the communication of the visual data to said computer (col. 1 lines 20-29 lines 45-57, and col. 3 lines 6-25). Puppo however does not explicitly teach said apparatus to include a plurality of cameras located perpendicular and oblique to a particular zone of interest. Pell teaches said shock wave generating and focusing lithotripter apparatus to include a plurality of image X-ray cameras located in such a position to generate an image oblique to the zone of interest (col. 4 lines 45-56, col. 8 lines 32-41). It would have therefore been obvious to one of ordinary skill in the art to use this particular camera arrangement teaching by Pell in the teaching by Puppo, and Duinker et al. for the purpose of generating images oblique to the zone of interest. Puppo, Duinker et al., and Pell however do not teach placing the cameras perpendicular to the zone of interest. In the same field of endeavor, Breidenthal et al. discloses a lithotripter apparatus with a plurality of image generating X-ray cameras located in such a position to generate an image perpendicular to the zone of interest (col. 4 lines 1-39). It would have therefore been obvious to one of ordinary skill in the art to use this particular camera arrangement teaching by Breidenthal et al. in the teaching by Puppo, Duinker et al., and Pell for the purpose of generating images perpendicularly to the zone of interest.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baisakhi Roy whose telephone number is 571-272-7139. The examiner can normally be reached on M-F (7:30 a.m. - 4p.m.).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

b.k.

BR


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PRIMARY EXAMINER